

09567863

FILE 'HOME' ENTERED AT 09:44:10 ON 09 JUN 2003

=> file biosis medline caplus wpids uspatfull  
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0.21	0.21

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 09:44:33 ON 09 JUN 2003

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FILE 'MEDLINE' ENTERED AT 09:44:33 ON 09 JUN 2003

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FILE 'WPIDS' ENTERED AT 09:44:33 ON 09 JUN 2003

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FILE 'USPATFULL' ENTERED AT 09:44:33 ON 09 JUN 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s primer and extension

L1 40246 PRIMER AND EXTENSION

=> s l1 and labeled nucleotide

L2 1679 L1 AND LABELED NUCLEOTIDE

=> s l2 and downstream (5a) labeled nucleotide

L3 8 L2 AND DOWNSTREAM (5A) LABELED NUCLEOTIDE

=> dup rem l3

PROCESSING COMPLETED FOR L3

L4 8 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 bib abs 1-8

L4 ANSWER 1 OF 8 WPIDS (C) 2003 THOMSON DERWENT

AN 2002-500845 [53] WPIDS

CR 2001-016253 [02]; 2001-191555 [19]

DNC C2002-141910

TI Detecting a nucleic acid insertion or deletion for detecting the presence of cancerous or precancerous tissue, comprises an assay that incorporates a **labeled nucleotide** complementary to a base **downstream** from a target region.

DC B04 D16

IN LAKEN, S J; PIERCEALL, W; SHUBER, A P

PA (EXAC-N) EXACT SCI CORP

CYC 100

PI WO 2002055740 A2 20020718 (200253)\* EN 46p

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT  
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZW

US 6503718 B2 20030107 (200306)

ADT WO 2002055740 A2 WO 2002-US935 20020110; US 6503718 B2 Provisional US

1999-134711P 19990518, CIP of US 1999-371991 19990811, CIP of US  
 1999-468670 19991221, US 2001-757949 20010110  
 PRAI US 2001-757949 20010110; US 1999-134711P 19990518; US 1999-371991  
 19990811; US 1999-468670 19991221  
 AN 2002-500845 [53] WPIDS  
 CR 2001-016253 [02]; 2001-191555 [19]  
 AB WO 200255740 A UPAB: 20030407

NOVELTY - Detecting (M1) a nucleic acid (NA) insertion or deletion comprises using a polymerase chain reaction (PCR) that incorporates a **labeled nucleotide** complementary to a base **downstream** from a target region (TR) and comparing the size of a labeled **extension** product (EP) compared to a standard.

DETAILED DESCRIPTION - Detecting (M1) a NA insertion or deletion comprises:

(a) selecting a NA having a known wild-type sequence and having a TR comprising a repeat sequence having 3 different types of nucleotide bases that are dGTP, dATP, dTTP or dCTP;

(b) contacting a sample with an oligonucleotide **primer** that is complementary to a portion of the NA immediately upstream of the TR;

(c) extending the **primer** in the presence of nucleotide bases that are complementary to the nucleotide bases of the TR, forming a **primer** EP;

(d) extending the **primer** EP in the presence of a **labeled nucleotide** complementary to a nucleotide base **downstream** from the TR in the NA, where the **labeled nucleotide** is not complementary to any of the nucleotide bases of the TR, producing a labeled EP comprising a sequence that is complementary to the entire TR;

(e) detecting the labeled EP; and

(f) comparing the size of the labeled EP to a standard, where a product smaller than the standard indicates a deletion and a product larger than the standard indicates an insertion.

INDEPENDENT CLAIMS are also included for the following:

(1) diagnosing colorectal cancer or precancer comprising:

(a) performing an assay to detect, in a stool sample from a patient, a NA mutation indicative of a colorectal lesion;

(b) performing a sigmoidoscopy on the patient; and

(c) diagnosing colorectal cancer or precancer if the assay or sigmoidoscopy is positive;

(2) localizing a colorectal lesion in a patient comprising:

(a) performing an assay to detect, in a stool sample from a patient, a NA mutation indicative of the colorectal lesion;

(b) performing a sigmoidoscopy on the patient;

(c) diagnosing a proximal colonic lesion if the assay is positive for the mutation and the sigmoidoscopy is negative; and

(d) diagnosing a distal colonic lesion if the sigmoidoscopy is positive and the assay is negative for the mutation;

(3) diagnosing hereditary non-polyposis colorectal cancer comprising:

(a) performing an assay to detect, in a stool sample from a patient, a NA mutation indicative of hereditary non-polyposis colorectal cancer;

(b) performing a colonoscopy on the patient; and

(c) diagnosing hereditary non-polyposis colorectal cancer if the assay is positive and the colonoscopy reveals an adenoma;

(4) determining whether a target nucleotide is present at a genetic locus of interest comprising performing the **primer extension** step of M1 and determining whether **labeled nucleotide** is present in the EP;

(5) determining whether a target point mutation is present at a genetic locus of interest comprising the method of (4);

(6) identifying a target single nucleotide polymorphic variant present at a genetic locus of interest comprising:

(a) contacting a NA in a biological sample with a **primer**

complementary to a portion of the genetic locus immediately upstream of a target single nucleotide polymorphic variant position;

(b) extending the **primer** in the presence of 2 differentially labeled nucleotides, where the first nucleotide is complementary to a nucleotide suspected to be present at the target position, and the second nucleotide is complementary to a second nucleotide alternatively suspected to be present at the target position;

(c) further extending the **primer** in the presence of a terminator nucleotide complementary to a nucleotide downstream from the target position, where the terminator is not complementary to the 2 nucleotides, to form an EP; and

(d) determining the identity of the **labeled nucleotide** present in the EP; and

(7) quantifying the number of NA having a target nucleotide present at a genetic locus of interest comprising M1 to form an EP and enumerating the number of EPs that comprise a labeled nucleotide.

USE - The method is used for detecting a NA insertion or deletion, to determine whether a target single nucleotide polymorphic variant is present at a genetic locus of interest, and to quantify the number of NA having a target nucleotide present at a genetic locus of interest. The presence of a deletion is indicative of the presence of cancerous or precancerous tissue in the biological sample and the amount of nucleotide present is an indicia of the severity of disease in a patient. Other new methods are used to diagnose colorectal cancer or precancer, to localize a colorectal lesion in a patient, to diagnose hereditary non-polyposis colorectal cancer, to determine whether a target nucleotide is present at a genetic locus of interest, to determine whether a target point mutation is present at a genetic locus of interest, to identify a target single nucleotide polymorphic variant present at a genetic locus of interest (all claimed).

ADVANTAGE - The new method has high sensitivity and high specificity. The method is non-invasive or minimally-invasive. The method reduces the background of primer extension reactions, making the analysis much easier to interpret compared to previous methods. The method can be used to detect a very small amount of mutant nucleic acid in a heterologous sample containing mainly normal nucleic acid.

Dwg.0/7

L4 ANSWER 2 OF 8 USPATFULL  
 AN 2002:227899 USPATFULL  
 TI Methods for detecting mutations using **primer extension**  
 for detecting disease  
 IN Laken, Steven, Pepperell, MA, UNITED STATES  
 PI US 2002123052 A1 20020905  
 US 6498012 B2 20021224  
 AI US 2001-883717 A1 20010618 (9)  
 RLI Continuation of Ser. No. US 2001-757949, filed on 10 Jan 2001, PENDING  
 Continuation-in-part of Ser. No. US 1999-371991, filed on 11 Aug 1999,  
 GRANTED, Pat. No. US 6280947 Continuation-in-part of Ser. No. US  
 1999-468670, filed on 21 Dec 1999, ABANDONED  
 PRAI US 1999-134711P 19990110 (60)  
 DT Utility  
 FS APPLICATION  
 LREP TESTA, HURWITZ & THIBEAULT, LLP, HIGH STREET TOWER, 125 HIGH STREET,  
 BOSTON, MA, 02110  
 CLMN Number of Claims: 43  
 ECL Exemplary Claim: 1  
 DRWN 8 Drawing Page(s)  
 LN.CNT 1468  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Methods of the invention comprise assays for markers indicative of  
 cancer, precancer, and other diseases or disorders. Assays of the

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invention are preformed on heterogeneous samples obtained from patients by non-invasive or minimally-invasive methods. Such assays may be employed alone or in combination with other disease screening techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 8 USPATFULL  
AN 2002:126275 USPATFULL  
TI Methods for detecting mutations using **primer extension**  
for detecting disease  
IN Shuber, Anthony P., Milford, MA, UNITED STATES  
Pierceall, William, Wellesley, MA, UNITED STATES  
PI US 2002064787 A1 20020530  
US 6475738 B2 20021105  
AI US 2001-883548 A1 20010618 (9)  
RLI Division of Ser. No. US 2001-757949, filed on 10 Jan 2001, PENDING  
Continuation-in-part of Ser. No. US 1999-371991, filed on 11 Aug 1999,  
PATENTED Continuation-in-part of Ser. No. US 1999-468670, filed on 21  
Dec 1999, ABANDONED  
PRAI US 1999-134711P 19990110 (60)  
DT Utility  
FS APPLICATION  
LREP TESTA, HURWITZ & THIBEAULT, LLP, HIGH STREET TOWER, 125 HIGH STREET,  
BOSTON, MA, 02110  
CLMN Number of Claims: 43  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Page(s)  
LN.CNT 1470

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of the invention comprise assays for markers indicative of cancer, precancer, and other diseases or disorders. Assays of the invention are preformed on heterogeneous samples obtained from patients by non-invasive or minimally-invasive methods. Such assays may be employed alone or in combination with other disease screening techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 8 USPATFULL  
AN 2002:85143 USPATFULL  
TI Methods for detecting mutations using **primer extension**  
IN Shuber, Anthony P., Milford, MA, UNITED STATES  
Pierceall, William, Wellesley, MA, UNITED STATES  
PI US 2002045183 A1 20020418  
US 6482595 B2 20021119  
AI US 2001-940225 A1 20010827 (9)  
RLI Continuation of Ser. No. US 1999-371991, filed on 11 Aug 1999, UNKNOWN  
DT Utility  
FS APPLICATION  
LREP TESTA, HURWITZ & THIBEAULT, LLP, HIGH STREET TOWER, 125 HIGH STREET,  
BOSTON, MA, 02110  
CLMN Number of Claims: 30  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Page(s)  
LN.CNT 771

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for detecting nucleotide deletions in biological samples are described. Methods of the invention are particularly useful for detecting deletions in regions of polynucleotide repeats. In particular, methods of the invention are useful to detect deletions at the BAT26 locus.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 8 WPIDS (C) 2003 THOMSON DERWENT

AN 2001-191555 [19] WPIDS

CR 2001-016253 [02]; 2002-500845 [53]

DNC C2001-057441

TI Detecting mutation, involves annealing **primer** upstream of target region to form **primer extension** product which is extended in presence of **labeled nucleotide**, comparing size of labeled **extension** product to standard.

DC B04 D16

IN PIERCEALL, W; SHUBER, A P

PA (EXAC-N) EXACT LAB INC; (EXAC-N) EXACT SCI CORP; (PIER-I) PIERCEALL W;  
(SHUB-I) SHUBER A P

CYC 29

PI WO 2001011083 A2 20010215 (200119)\* EN 25p

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

W: AU CA JP

AU 2000066273 A 20010305 (200130)

US 6280947 B1 20010828 (200151)

US 2002045183 A1 20020418 (200228)

EP 1203100 A2 20020508 (200238) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI

US 6482595 B2 20021119 (200280)

ADT WO 2001011083 A2 WO 2000-US21763 20000809; AU 2000066273 A AU 2000-66273  
20000809; US 6280947 B1 US 1999-371991 19990811; US 2002045183 A1 Cont of  
US 1999-371991 19990811, US 2001-940225 20010827; EP 1203100 A2 EP  
2000-953902 20000809, WO 2000-US21763 20000809; US 6482595 B2 Cont of US  
1999-371991 19990811, US 2001-940225 20010827

FDT AU 2000066273 A Based on WO 200111083; EP 1203100 A2 Based on WO  
200111083; US 6482595 B2 Cont of US 6280947

PRAI US 1999-371991 19990811; US 2001-940225 20010827

AN 2001-191555 [19] WPIDS

CR 2001-016253 [02]; 2002-500845 [53]

AB WO 200111083 A UPAB: 20021212

NOVELTY - Detecting a nucleic acid insertion or deletion, comprising selecting a nucleic acid having a known sequence and a target region (TR) comprising at most three different types of base, contacting a sample with an annealing **primer** complementary to a portion of the nucleic acid immediately upstream of TR, and extending it in the presence of bases that are complementary to the bases of TR, is new.

DETAILED DESCRIPTION - Detecting a nucleic acid insertion or deletion, comprising selecting a nucleic acid having a known sequence and a target region (TR) comprising at most three different types of base, contacting a sample with an annealing **primer** complementary to a portion of the nucleic acid immediately upstream of TR, and extending it in the presence of bases that are complementary to the bases of TR, is new. The method further comprises:

(a) extending the product in the presence of a **labeled nucleotide** complementary to a base **downstream** from TR in the nucleic acid, but not complementary to any of the nucleotide bases of TR; and

(b) comparing the size of labeled **extension** product (LEP) obtained in (a) to a standard, in which LEP smaller than the standard indicates the presence of a deletion in the target reaction and LEP larger than the standard indicates the presence of an insertion in TR.

An INDEPENDENT CLAIM is also included for a method of detecting a nucleic acid insertion or deletion, comprising:

(a) selecting a nucleic acid with a known wild-type sequence and having TR suspected of containing a deletion, in which TR contains at most three different types of nucleotide;

- (b) hybridizing an annealing **primer** to a region upstream of TR, in a nucleic acid sample;
- (c) contacting the hybridized **primer** with an **extension** reaction mixture comprising:
- (i) nucleotides that are complementary to the nucleotides in TR;
  - (ii) a **labeled nucleotide** complementary to a nucleotide found **downstream** from TR, but not complementary to any nucleotide found within TR; and
  - (iii) a terminator nucleotide that is complementary to a nucleotide found downstream from TR, but not complementary to any nucleotide found in TR;
- (d) extending the hybridized **primer** to generate LEP; and
- (e) comparing the size of LEP from (d) to a standard, in which LEP smaller than the standard indicates the presence of a deletion in TR, and LEP larger than the standard indicates the presence of an insertion.

USE - For detecting a nucleic acid insertion or deletion in a biological sample, e.g. a stool or homogenized stool or urine, semen, blood, sputum, cerebrospinal fluid, pus or aspirate sample which contains a heterogeneous mixture of mutant nucleic acid having a deletion in TR, and wild type nucleic acid with no deletion in TR. Preferably, a deletion in TR, is present in 1-5 % of the nucleic acid molecules containing TR. The deletion in TR indicates the presence of colorectal cancer or precancerous tissue in the biological sample. Preferably, TR is the polyA tract at the BAT26 locus. Alternatively, the presence of a deletion in TR is associated with the presence of a mutation at a separate genetic locus such as ODC, APC, p53 or RAS that is associated with cancer or precancer. (All claimed).

ADVANTAGE - The methods retain the specificity of **primer extension** assays while increasing their sensitivity by reducing background due to premature termination of the **extension** reaction, and can be used to detect a small amount of mutant nucleic acid in a heterogeneous sample containing mainly normal nucleic acid.

Dwg.0/3

L4 ANSWER 6 OF 8 USPATFULL  
 AN 2001:145045 USPATFULL  
 TI Methods for detecting mutations using **primer extension**  
 for detecting disease  
 IN Shuber, Anthony P., Milford, MA, United States  
 Pierceall, William, Wellesley, MA, United States  
 Laken, Steven J., Pepperell, MA, United States  
 PI US 2001018180 A1 20010830  
 US 6503718 B2 20030107  
 AI US 2001-757949 A1 20010110 (9)  
 RLI Continuation-in-part of Ser. No. US 1999-468670, filed on 21 Dec 1999,  
 PENDING Continuation-in-part of Ser. No. US 1999-371991, filed on 11 Aug  
 1999, PENDING  
 PRAI US 1999-134711P 19990110 (60)  
 DT Utility  
 FS APPLICATION  
 LREP TESTA, HURWITZ & THIBEAULT, LLP, HIGH STREET TOWER, 125 HIGH STREET,  
 BOSTON, MA, 02110  
 CLMN Number of Claims: 43  
 ECL Exemplary Claim: 1  
 DRWN 8 Drawing Page(s)  
 LN.CNT 1438  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Methods of the invention comprise assays for markers indicative of  
 cancer, precancer, and other diseases or disorders. Assays of the  
 invention are preformed on heterogeneous samples obtained from patients  
 by non-invasive or minimally-invasive methods. Such assays may be  
 employed alone or in combination with other disease screening

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techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 8 USPATFULL  
AN 2001:142089 USPATFULL  
TI Methods for detecting nucleotide insertion or deletion using  
**primer extension**  
IN Shuber, Anthony P., Milford, MA, United States  
Pierceall, William, Wellesley, MA, United States  
PA Exact Sciences Corporation, Maynard, MA, United States (U.S.  
corporation)  
PI US 6280947 B1 20010828  
AI US 1999-371991 19990811 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Forman, B J  
LREP Testa Hurwitz & Thibeault LLP  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 984

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for detecting a nucleotide insertion or deletion in biological  
samples are described. Methods of the invention are particularly useful  
for detecting a nucleotide insertion or deletion in regions of  
polynucleotide repeats. In particular, methods of the invention are  
useful to detect a nucleotide insertion or deletion at the BAT26 locus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 8 WPIDS (C) 2003 THOMSON DERWENT  
AN 2001-016253 [02] WPIDS  
CR 2001-191555 [19]; 2002-500845 [53]  
DNC C2001-004558  
TI Diagnosing colorectal disease especially hereditary non-polyposis  
colorectal cancer, by detecting a mutation in BAT-26 locus of nucleic acid  
from patient's sample.  
DC B04 D16  
IN LAKEN, S; LAKEN, S J; PIERCEALL, W; SHUBER, A P  
PA (EXAC-N) EXACT LAB INC; (EXAC-N) EXACT SCI CORP; (LAKE-I) LAKEN S J;  
(PIER-I) PIERCEALL W; (SHUB-I) SHUBER A P; (LAKE-I) LAKEN S  
CYC 23  
PI WO 2000070096 A2 20001123 (200102)\* EN 23p  
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
W: AU CA JP  
AU 2000050274 A 20001205 (200113)  
US 2001018180 A1 20010830 (200151)  
EP 1179092 A2 20020213 (200219) EN  
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE  
US 2002064787 A1 20020530 (200240)  
US 2002123052 A1 20020905 (200260)  
US 6475738 B2 20021105 (200276)  
US 6498012 B2 20021224 (200303)  
JP 2002543855 W 20021224 (200313) 31p  
ADT WO 2000070096 A2 WO 2000-US13655 20000518; AU 2000050274 A AU 2000-50274  
20000518; US 2001018180 A1 Provisional US 1999-134711P 19990518, CIP of US  
1999-371991 19990811, CIP of US 1999-468670 19991221, US 2001-757949  
20010110; EP 1179092 A2 EP 2000-932573 20000518, WO 2000-US13655 20000518;  
US 2002064787 A1 Provisional US 1999-134711P 19990518, CIP of US  
1999-371991 19990811, CIP of US 1999-468670 19991221, Div ex US  
2001-757949 20010110, US 2001-883548 20010618; US 2002123052 A1

Provisional US 1999-134711P 19990518, CIP of US 1999-371991 19990811, CIP of US 1999-468670 19991221, Cont of US 2001-757949 20010110, US 2001-883717 20010618; US 6475738 B2 Provisional US 1999-134711P 19990518, CIP of US 1999-371991 19990811, CIP of US 1999-468670 19991221, Div ex US 2001-757949 20010110, US 2001-883548 20010618; US 6498012 B2 Provisional US 1999-134711P 19990518, CIP of US 1999-371991 19990811, CIP of US 1999-468670 19991221, Cont of US 2001-757949 20010110, US 2001-883717 20010618; JP 2002543855 W JP 2000-618501 20000518, WO 2000-US13655 20000518

FDT AU 2000050274 A Based on WO 200070096; EP 1179092 A2 Based on WO 200070096; US 2002123052 A1 CIP of US 6280947; US 6475738 B2 CIP of US 6280947; US 6498012 B2 CIP of US 6280947; JP 2002543855 W Based on WO 200070096

PRAI US 1999-468670 19991221; US 1999-134711P 19990518; US 1999-371991 19990811; US 2001-757949 20010110; US 2001-883548 20010618; US 2001-883717 20010618

AN 2001-016253 [02] WPIDS

CR 2001-191555 [19]; 2002-500845 [53]

AB WO 200070096 A UPAB: 20030224

NOVELTY - Diagnosing (M1) a patient with a colonic disease or disorder, comprising detecting a mutation in a BAT-26 locus in the nucleic acid from a tissue or body fluid sample, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) determining (M2) a site of colonic disease or disorder in a patient comprising identifying a mutation in the BAT-26 locus of a patient tissue or body fluid sample, and determining the presence of disease or disorder in the proximal colon;

(2) detecting the presence of a colonic disease or disorder, comprising detecting a mutation in a BAT-26 locus in nucleic acid in a tissue or body fluid sample, identifying a mutation in a p53, apc or Kras locus in the nucleic acid, and detecting the disease or disorder if either assay is positive;

(3) confirming the presence of colonic disease or disorder in a patient, comprising performing (M1), performing a colonoscopy on the patient, and confirming a colonic disease or disorder as a lesion or polyp detectable by the colonoscopy; and

(4) determining a patient at risk of developing hereditary non-polyposis colorectal cancer comprising detecting the presence of an adenoma, by performing (M1) on a stool sample.

USE - To diagnose a patient having a colonic disease or disorder, especially hereditary non-polyposis colorectal cancer, and other disorders such as pre-cancer, adenoma, polyp, inflammatory bowel disorder, inflammatory bowel syndrome, regional enteritis, granulomatous ileitis, granulomatous ileocolitis, Crohn's disease, ileitis, ileocolitis, jejunoileitis, granulomatous colitis, Yersinia enterocolitica enteritis, ulcerative colitis, pseudo-membranous colitis, irritable bowel syndrome, diverticulosis, diverticulitis, intestinal parasites, infectious gastroenteritis, toxic gastroenteritis and bacterial gastroenteritis (claimed).

ADVANTAGE - The diagnosing method has high sensitivity, high specificity for detecting indication of cancer, pre-cancer and other diseases or disorders, especially in heterogeneous samples.

Dwg.0/5



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=> d his

(FILE 'HOME' ENTERED AT 09:44:10 ON 09 JUN 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:44:33 ON  
09 JUN 2003

L1 40246 S PRIMER AND EXTENSION  
L2 1679 S L1 AND LABELED NUCLEOTIDE  
L3 8 S L2 AND DOWNSTREAM (5A) LABELED NUCLEOTIDE  
L4 8 DUP REM L3 (0 DUPLICATES REMOVED)

=> s l2 and same (3a)label?

L5 150 L2 AND SAME (3A) LABEL?

=> s l5 and repeat region

L6 14 L5 AND REPEAT REGION

=> s l6 not l4

L7 14 L6 NOT L4

=> dup rem l7

PROCESSING COMPLETED FOR L7

L8 14 DUP REM L7 (0 DUPLICATES REMOVED)

=> d l8 bib abs 1-14

L8 ANSWER 1 OF 14 USPATFULL  
AN 2003:106233 USPATFULL  
TI Compositions and methods for the therapy and diagnosis of pancreatic  
cancer  
IN Benson, Darin R., Seattle, WA, UNITED STATES  
Kalos, Michael D., Seattle, WA, UNITED STATES  
Lodes, Michael J., Seattle, WA, UNITED STATES  
Persing, David H., Redmond, WA, UNITED STATES  
Hepler, William T., Seattle, WA, UNITED STATES  
Jiang, Yuqiu, Kent, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)  
PI US 2003073144 A1 20030417  
AI US 2002-60036 A1 20020130 (10)  
PRAI US 2001-333626P 20011127 (60)  
US 2001-305484P 20010712 (60)  
US 2001-265305P 20010130 (60)  
US 2001-267568P 20010209 (60)  
US 2001-313999P 20010820 (60)  
US 2001-291631P 20010516 (60)  
US 2001-287112P 20010428 (60)  
US 2001-278651P 20010321 (60)  
US 2001-265682P 20010131 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 14253  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Compositions and methods for the therapy and diagnosis of cancer,  
particularly pancreatic cancer, are disclosed. Illustrative compositions  
comprise one or more pancreatic tumor polypeptides, immunogenic portions  
thereof, polynucleotides that encode such polypeptides, antigen

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presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 14 USPATFULL  
AN 2003:129820 USPATFULL  
TI FEN-1 endonucleases, mixtures and cleavage methods  
IN Kaiser, Michael W., Madison, WI, United States  
Lyamichev, Victor I., Madison, WI, United States  
Lyamicheva, Natasha, Madison, WI, United States  
PA Third Wave Technologies, Ins., Madison, WI, United States (U.S. corporation)  
PI US 6562611 B1 20030513  
WO 9823774 19980604  
AI US 1999-308825 19991008 (9)  
WO 1997-US21783 19971126  
19991008 PCT 371 date  
RLI Continuation of Ser. No. US 1996-757653, filed on 29 Nov 1996, now patented, Pat. No. US 5843669 Continuation of Ser. No. US 1996-758314, filed on 2 Dec 1996, now patented, Pat. No. US 6090606  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Patterson, Jr., Charles L.  
LREP Medlen & Carroll, LLP  
CLMN Number of Claims: 47  
ECL Exemplary Claim: 1  
DRWN 198 Drawing Figure(s); 185 Drawing Page(s)  
LN.CNT 13398

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to improved cleavage means for the detection and characterization of nucleic acid sequences. Structure-specific nucleases derived from a variety of thermostable organisms are provided. These structure-specific nucleases are used to cleave target-dependent cleavage structures, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 14 USPATFULL  
AN 2003:115740 USPATFULL  
TI FEN-1 endonuclease, mixtures and cleavage methods  
IN Kaiser, Michael W., Madison, WI, United States  
Lyamichev, Victor I., Madison, WI, United States  
Lyamicheva, Natasha, Madison, WI, United States  
PA Third Wave Technologies, Inc., Madison, WI, United States (U.S. corporation)  
PI US 6555357 B1 20030429  
AI US 2000-684938 20001006 (9)  
RLI Division of Ser. No. US 308825 Continuation of Ser. No. US 1996-757653, filed on 29 Nov 1996, now patented, Pat. No. US 5843669 Continuation of Ser. No. US 1996-758314, filed on 2 Dec 1996, now patented, Pat. No. US 6090606  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Patterson, Jr., Charles L.  
LREP Medlen & Carroll, LLP

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CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN 219 Drawing Figure(s); 185 Drawing Page(s)  
LN.CNT 13235

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to improved cleavage means for the detection and characterization of nucleic acid sequences. Structure-specific nucleases derived from a variety of thermostable organisms are provided. These structure-specific nucleases are used to cleave target-dependent cleavage structures, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 14 USPATFULL  
AN 2002:329806 USPATFULL  
TI Invasion assays  
IN Hall, Jeff G., Madison, WI, UNITED STATES  
Lyamichev, Victor I., Madison, WI, UNITED STATES  
Mast, Andrea L., Madison, WI, UNITED STATES  
Brow, Mary Ann D., Madison, WI, UNITED STATES  
PI US 2002187486 A1 20021212  
AI US 2001-33297 A1 20011102 (10)  
RLI Continuation of Ser. No. US 1999-350597, filed on 9 Jul 1999, PENDING  
Continuation of Ser. No. US 1997-823516, filed on 24 Mar 1997, GRANTED,  
Pat. No. US 5994069 Continuation-in-part of Ser. No. US 1996-756038,  
filed on 26 Nov 1996, ABANDONED Continuation-in-part of Ser. No. US  
1996-756386, filed on 26 Nov 1996, GRANTED, Pat. No. US 5985557  
Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996,  
GRANTED, Pat. No. US 6001567 Continuation-in-part of Ser. No. US  
1996-599491, filed on 24 Jan 1996, GRANTED, Pat. No. US 5846717  
DT Utility  
FS APPLICATION  
LREP MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA,  
94105  
CLMN Number of Claims: 34  
ECL Exemplary Claim: 1  
DRWN 121 Drawing Page(s)  
LN.CNT 10560

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based on charge. The present invention also provides methods for the detection of non-target cleavage products via the formation of a complete and activated protein binding region. The invention further provides sensitive and specific methods for the detection of human cytomegalovirus nucleic acid in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 14 USPATFULL

09567863

AN 2002:272801 USPATFULL  
TI Compositions and methods for the therapy and diagnosis of colon cancer  
IN Stolk, John A., Bothell, WA, UNITED STATES  
Xu, Jiangchun, Bellevue, WA, UNITED STATES  
Chenault, Ruth A., Seattle, WA, UNITED STATES  
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)  
PI US 2002150922 A1 20021017  
AI US 2001-998598 A1 20011116 (9)  
PRAI US 2001-304037P 20010710 (60)  
US 2001-279670P 20010328 (60)  
US 2001-267011P 20010206 (60)  
US 2000-252222P 20001120 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 14 USPATFULL  
AN 2002:251118 USPATFULL  
TI Method of determining the nucleotide sequence of oligonucleotides and DNA molecules  
IN Williams, Peter, Phoenix, AZ, UNITED STATES  
Taylor, Thomas J., Tempe, AZ, UNITED STATES  
Williams, Daniel J.B., Tempe, AZ, UNITED STATES  
Gould, Ian, Phoenix, AZ, UNITED STATES  
Hayes, Mark A., Gilbert, AZ, UNITED STATES  
PI US 2002137062 A1 20020926  
AI US 2001-941882 A1 20010828 (9)  
RLI Continuation-in-part of Ser. No. US 2001-673544, filed on 26 Feb 2001, PENDING Continuation-in-part of Ser. No. WO 1999-US9616, filed on 30 Apr 1999, UNKNOWN  
PRAI US 1998-83840P 19980501 (60)  
DT Utility  
FS APPLICATION  
LREP BAKER & BOTTS, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112  
CLMN Number of Claims: 32  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 2311

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel method for analyzing nucleic acid sequences based on real-time detection of DNA polymerase-catalyzed incorporation of each of the four nucleotide bases, supplied individually and serially in a microfluidic system, to a reaction cell containing a template system comprising a DNA fragment of unknown sequence and an oligonucleotide **primer**. Incorporation of a

nucleotide base into the template system can be detected by any of a variety of methods including but not limited to fluorescence and chemiluminescence detection. Alternatively, microcalorimetric detection of the heat generated by the incorporation of a nucleotide into the extending template system using thermopile, thermistor and refractive index measurements can be used to detect **extension** reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 7 OF 14 USPATFULL  
 AN 2002:243051 USPATFULL  
 TI Compositions and methods for the therapy and diagnosis of ovarian cancer  
 IN Algate, Paul A., Issaquah, WA, UNITED STATES  
 Jones, Robert, Seattle, WA, UNITED STATES  
 Harlocker, Susan L., Seattle, WA, UNITED STATES  
 PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)  
 PI US 2002132237 A1 20020919  
 AI US 2001-867701 A1 20010529 (9)  
 PRAI US 2000-207484P 20000526 (60)  
 DT Utility  
 FS APPLICATION  
 LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
 SEATTLE, WA, 98104-7092  
 CLMN Number of Claims: 11  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 8 OF 14 USPATFULL  
 AN 2002:221330 USPATFULL  
 TI Methods for the detection of nucleic acids  
 IN Shuber, Anthony P., Milford, MA, UNITED STATES  
 Lapidus, Stanley N., Bedford, NH, UNITED STATES  
 PI US 2002119469 A1 20020829  
 AI US 2001-972767 A1 20011005 (9)  
 RLI Continuation of Ser. No. US 2000-542377, filed on 4 Apr 2000, GRANTED, Pat. No. US 6300077 Continuation-in-part of Ser. No. US 1998-98180, filed on 16 Jun 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-876857, filed on 16 Jun 1997, GRANTED, Pat. No. US 5928870 Continuation-in-part of Ser. No. US 1996-700583, filed on 14 Aug 1996, GRANTED, Pat. No. US 5670325  
 DT Utility  
 FS APPLICATION  
 LREP TESTA, HURWITZ & THIBEAULT, LLP, HIGH STREET TOWER, 125 HIGH STREET,  
 BOSTON, MA, 02110  
 CLMN Number of Claims: 21  
 ECL Exemplary Claim: 1  
 DRWN 3 Drawing Page(s)  
 LN.CNT 1309

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for identifying nucleic acids. Methods of the

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invention are usefull for identifying and analyzing nucleic acids, especially variants of single nucleotide polymorphisms, that are indicative of disease or the predisposition for disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 9 OF 14 USPATFULL  
AN 2002:78405 USPATFULL  
TI Compositions and methods for analysis of nucleic acids  
IN Makarov, Vladimir L., Ann Arbor, MI, UNITED STATES  
Langmore, John P., Ann Arbor, MI, UNITED STATES  
PA The Regents of the University of Michigan (U.S. corporation)  
PI US 2002042059 A1 20020411  
AI US 2001-801346 A1 20010306 (9)  
RLI Continuation of Ser. No. US 1998-151236, filed on 10 Sep 1998, GRANTED, Pat. No. US 6197557 Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-811804, filed on 6 Mar 1997, GRANTED, Pat. No. US 6117634  
DT Utility  
FS APPLICATION  
LREP David L. Parker, FULBRIGHT & JAWORSKI L.L.P., 600 Congress Avenue, Suite 2400, Austin, TX, 78701  
CLMN Number of Claims: 104  
ECL Exemplary Claim: 1  
DRWN 38 Drawing Page(s)  
LN.CNT 6552

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide **primer**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 10 OF 14 USPATFULL  
AN 2002:254176 USPATFULL  
TI Detection of nucleic acids by multiple sequential invasive cleavages 02  
IN Hall, Jeff G., Madison, WI, United States  
Lyamichev, Victor I., Madison, WI, United States  
Mast, Andrea L., Madison, WI, United States  
Brow, Mary Ann D., Madison, WI, United States  
PA Third Wave Technologies, Inc, Madison, WI, United States (U.S. corporation)  
PI US 6458535 B1 20021001  
AI US 1999-350597 19990709 (9)  
RLI Continuation of Ser. No. US 1997-823516, filed on 24 Mar 1997, now patented, Pat. No. US 5994069 Continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996, now patented, Pat. No. US 6090543 Continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996, now patented, Pat. No. US 5085557 Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996, now patented, Pat. No. US 6001567 Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, now patented, Pat. No. US 5846717, issued on 8 Dec 1998  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Souaya, Jehanne  
LREP Medlen & Carroll, LLP

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CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 170 Drawing Figure(s); 128 Drawing Page(s)

LN.CNT 13831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based on charge. The present invention also provides methods for the detection of non-target cleavage products via the formation of a complete and activated protein binding region. The invention further provides sensitive and specific methods for the detection of human cytomegalovirus nucleic acid in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 11 OF 14 USPATFULL

AN 2001:173338 USPATFULL

TI Methods for the detection of nucleic acids

IN Shuber, Anthony P., Milford, MA, United States

Lapidus, Stanley N., Bedford, NH, United States

PA Exact Sciences Corporation, Maynard, MA, United States (U.S. corporation)

PI US 6300077 B1 20011009

AI US 2000-542377 20000404 (9)

RLI Continuation-in-part of Ser. No. US 1998-98180, filed on 16 Jun 1998, now abandoned Continuation-in-part of Ser. No. US 1997-876857, filed on 16 Jun 1997, now patented, Pat. No. US 5928870 Continuation-in-part of Ser. No. US 1996-700583, filed on 14 Aug 1996, now patented, Pat. No. US 5670325

DT Utility

FS GRANTED

EXNAM Primary Examiner: Houtteman, Scott W.

LREP Testa Hurwitz & Thibault LLP

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1426

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for identifying nucleic acids. Methods of the invention are useful for identifying and analyzing nucleic acids, especially variants of single nucleotide polymorphisms, that are indicative of disease or the predisposition for disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 12 OF 14 USPATFULL

AN 2001:40208 USPATFULL

TI Methods for the detection of nucleic acids

IN Shuber, Anthony P., Milford, MA, United States

Lapidus, Stanley N., Bedford, NH, United States

Daley, George Q., Weston, MA, United States

PA Exact Science Corp., Maynard, MA, United States (U.S. corporation)  
Whitehead Institute for Biomedical Research, Cambridge, MA, United States (U.S. corporation)

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PI US 6203993 B1 20010320  
AI US 2000-542103 20000404 (9)  
RLI Continuation of Ser. No. US 1998-98180, filed on 16 Jun 1998  
Continuation-in-part of Ser. No. US 1997-876857, filed on 16 Jun 1997,  
now patented, Pat. No. US 5928870 Continuation-in-part of Ser. No. US  
1996-700583, filed on 14 Aug 1996, now patented, Pat. No. US 5670325  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Houtteman, Scott W.  
LREP Testa Hurwitz & Thibeault LLP  
CLMN Number of Claims: 4  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 1231

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for identifying nucleic acids. Methods of the  
invention are useful for identifying and analyzing nucleic acids,  
especially variants of single nucleotide polymorphisms, that are  
indicative of disease or the predisposition for disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 13 OF 14 USPATFULL  
AN 2001:33054 USPATFULL  
TI Compositions and methods for analysis of nucleic acids  
IN Makarov, Vladimir L., Ann Arbor, MI, United States  
Langmore, John P., Ann Arbor, MI, United States  
PA The Regents of the University of Michigan, Ann Arbor, MI, United States  
(U.S. corporation)  
PI US 6197557 B1 20010306  
AI US 1998-151236 19980910 (9)  
RLI Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, now  
abandoned Continuation-in-part of Ser. No. US 1997-811804, filed on 6  
Mar 1997, now patented, Pat. No. US 6117634  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Brusca, John S.; Assistant Examiner: Kim, Young  
LREP Fulbright & Jaworski, LLP  
CLMN Number of Claims: 46  
ECL Exemplary Claim: 1  
DRWN 67 Drawing Figure(s); 38 Drawing Page(s)  
LN.CNT 5768

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are a number of methods that can be used in a variety of  
embodiments, including, creation of a nucleic acid terminated at one or  
more selected bases, sequence analysis of nucleic acids, mapping of  
sequence motifs within a nucleic acid, positional mapping of nucleic  
acid clones, and analysis of telomeric regions. The methods utilize  
double-stranded templates, and in most aspects involve a strand  
replacement reaction initiated at one or more random or specific  
locations created in a nucleic acid molecule, and in certain aspects  
utilizing an oligonucleotide **primer**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 14 OF 14 USPATFULL  
AN 1999:155453 USPATFULL  
TI Detection of nucleic acids by multiple sequential invasive cleavages  
IN Hall, Jeff G., Madison, WI, United States  
Lyamichev, Victor I., Madison, WI, United States  
Mast, Andrea L., Madison, WI, United States  
Brow, Mary Ann D., Madison, WI, United States



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PA Third Wave Technologies, Inc., Madison, WI, United States (U.S. corporation)  
PI US 5994069 19991130  
AI US 1997-823516 19970324 (8)  
RLI Continuation-in-part of Ser. No. WO 1997-US1072, filed on 21 Jan 1997 which is a continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996 And a continuation-in-part of Ser. No. US 1996-758314, filed on 2 Dec 1996 which is a continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996 which is a continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996 which is a continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, said Ser. No. US 759038 which is a continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Shoemaker, Debra  
LREP Medlen & Carroll, LLP  
CLMN Number of Claims: 34  
ECL Exemplary Claim: 1  
DRWN 169 Drawing Figure(s); 128 Drawing Page(s)  
LN.CNT 14892

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based on charge. The present invention also provides methods for the detection of non-target cleavage products via the formation of a complete and activated protein binding region. The invention further provides sensitive and specific methods for the detection of human cytomegalovirus nucleic acid in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d his

(FILE 'HOME' ENTERED AT 09:44:10 ON 09 JUN 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:44:33 ON  
09 JUN 2003

L1 40246 S PRIMER AND EXTENSION  
L2 1679 S L1 AND LABELED NUCLEOTIDE  
L3 8 S L2 AND DOWNSTREAM (5A) LABELED NUCLEOTIDE  
L4 8 DUP REM L3 (0 DUPLICATES REMOVED)  
L5 150 S L2 AND SAME (3A) LABEL?  
L6 14 S L5 AND REPEAT REGION  
L7 14 S L6 NOT L4  
L8 14 DUP REM L7 (0 DUPLICATES REMOVED)

=>

=> s l5 and repeat

L9 63 L5 AND REPEAT

=> s l9 and repeat (5a) labeled nucleotide?

L10 0 L9 AND REPEAT (5A) LABELED NUCLEOTIDE?

=> s l5 and repeat (6a) labeled nucleotide?

L11 0 L5 AND REPEAT (6A) LABELED NUCLEOTIDE?

=> s l2 and repeat (6a) labeled nucleotide?

L12 0 L2 AND REPEAT (6A) LABELED NUCLEOTIDE?

=>

=> s l2 and region (6a) labeled nucleotide?

L13 20 L2 AND REGION (6A) LABELED NUCLEOTIDE?

=> s l13 not l6

L14 17 L13 NOT L6

=> s l14 not l3

L15 12 L14 NOT L3

=> dup rem l15

PROCESSING COMPLETED FOR L15

L16 12 DUP REM L15 (0 DUPLICATES REMOVED)

=> d l16 bib abs 1-12

L16 ANSWER 1 OF 12 USPATFULL

AN 2003:93148 USPATFULL

TI System and methods for mixing within a microfluidic device

IN Gallagher, Sean, Claremont, CA, UNITED STATES

Druyor-Sanchez, Roberta, Mesa, AZ, UNITED STATES

Chan, Yuk-Tong, Scottsdale, AZ, UNITED STATES

Dorris, David, Austin, TX, UNITED STATES

Dues, Lawrence, Chandler, AZ, UNITED STATES

De La Cerda, Alan Paul, Chandler, AZ, UNITED STATES

Simonson, Norb, Mesa, AZ, UNITED STATES

Anderson, Clifford Lynde Hunt, Tempe, AZ, UNITED STATES

Franciskovich, Phillip, Phoenix, AZ, UNITED STATES

Kahn, Peter Albert, Phoenix, AZ, UNITED STATES

PI US 2003064507 A1 20030403

AI US 2002-206841 A1 20020726 (10)

PRAI US 2002-395257P 20020711 (60)

US 2001-308169P 20010726 (60)

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DT Utility  
FS APPLICATION  
LREP Robin M. Silva, Esq., DORSEY & WHITNEY, LLP, Suite 3400, Four  
Embarcadero Center, San Francisco, CA, 94111-4187  
CLMN Number of Claims: 113  
ECL Exemplary Claim: 1  
DRWN 13 Drawing Page(s)  
LN.CNT 3079

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides microfluidic systems comprising microfluidic chambers and mixers, and methods of use. The microfluidic chambers of the present invention comprise a flexible membrane which provides efficient mixing of the solution therein. The present invention also provides a microfluidic chamber in fluidic communication with a micro-disk and a microfluidic chamber comprising a shim such that and a contiguous gap is present between a sample fluid and the chamber membrane. The microfluidic systems find use in the decrease in time for reactions occurring therein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 2 OF 12 USPATFULL  
AN 2002:294548 USPATFULL  
TI DNA polymerases having improved **labeled nucleotide**  
incorporation properties  
IN Brandis, John, Hercules, CA, UNITED STATES  
Bloom, Curtis, Chino Hills, CA, UNITED STATES  
Richards, John H., Bradbury, CA, UNITED STATES  
PA The Perkin-Elmer Corporation (U.S. corporation)  
PI US 2002164591 A1 20021107  
AI US 2001-794262 A1 20010227 (9)  
RLI Division of Ser. No. US 1998-41878, filed on 12 Mar 1998, GRANTED, Pat.  
No. US 6265193  
PRAI US 1997-39610P 19970312 (60)  
DT Utility  
FS APPLICATION  
LREP PATTI SELAN, PATENT ADMINISTRATOR, APPLIED BIOSYSTEMS, 850 LINCOLN  
CENTRE DRIVE, FOSTER CITY, CA, 94404  
CLMN Number of Claims: 15  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 1265

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to mutant DNA polymerases that exhibit reduced discrimination against labeled nucleotides into polynucleotides. The DNA polymerases of the invention have at least one mutation in the nucleotide label interaction region of the enzyme such the mutation results in reduced discrimination against labeled nucleotides. The nucleotide label interaction regions is located at portions of the O-helix, (ii) the K helix, and (iii) the inter O--P helical loop of Taq DNA polymerase or analogous positions in other DNA polymerases.

In addition to providing novel mutant DNA polymerases, the invention also provides polynucleotides encoding the subject mutant DNA polymerases. The polynucleotides provided may comprise expression vectors for the recombinant production of the mutant polymerases. The invention also provide host cells containing the subject polynucleotides. The invention also includes numerous methods of using the subject DNA polymerases, including uses for chain termination sequencing and PCR. Another aspect of the invention is to provide kits for synthesizing fluorescently labeled polynucleotides in accordance with the methods of the invention. Kits of the invention comprise a

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mutant DNA polymerase of the invention and a fluorescently  
**labeled nucleotide** that exhibits reduced  
discrimination with respect to the mutant DNA polymerase in the kit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 3 OF 12 USPATFULL  
AN 2002:242791 USPATFULL  
TI Compositions and methods for the therapy and diagnosis of colon cancer  
IN King, Gordon E., Shoreline, WA, UNITED STATES  
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES  
Xu, Jiangchun, Bellevue, WA, UNITED STATES  
Secrist, Heather, Seattle, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)  
PI US 2002131971 A1 20020919  
AI US 2001-33528 A1 20011226 (10)  
RLI Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001,  
PENDING  
PRAI US 2001-302051P 20010629 (60)  
US 2001-279763P 20010328 (60)  
US 2000-223283P 20000803 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 8083

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer,  
particularly colon cancer, are disclosed. Illustrative compositions  
comprise one or more colon tumor polypeptides, immunogenic portions  
thereof, polynucleotides that encode such polypeptides, antigen  
presenting cell that expresses such polypeptides, and T cells that are  
specific for cells expressing such polypeptides. The disclosed  
compositions are useful, for example, in the diagnosis, prevention  
and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 4 OF 12 USPATFULL  
AN 2002:221316 USPATFULL  
TI Methods and products for analyzing polymers  
IN Chan, Eugene Y., Brookline, MA, UNITED STATES  
PI US 2002119455 A1 20020829  
AI US 2001-852968 A1 20010510 (9)  
RLI Division of Ser. No. US 1998-134411, filed on 13 Aug 1998, PATENTED  
PRAI WO 1998-US3024 19980211  
US 1997-64687P 19971105 (60)  
US 1997-37921P 19970212 (60)  
DT Utility  
FS APPLICATION  
LREP Helen C. Lockhart, Esq., Wolf, Greenfield & Sacks, P.C., 600 Atlantic  
Avenue, Boston, MA, 02210  
CLMN Number of Claims: 159  
ECL Exemplary Claim: 1  
DRWN 10 Drawing Page(s)  
LN.CNT 6864

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and products for analyzing polymers are provided. The methods  
include methods for determining various other structural properties of

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the polymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 5 OF 12 USPATFULL  
AN 2002:43163 USPATFULL  
TI Methods and apparatus for analyzing polynucleotide sequences  
IN Quake, Stephen, San Marino, CA, UNITED STATES  
Volkmuth, Wayne, Calabasas, CA, UNITED STATES  
Unger, Marc, South San Francisco, CA, UNITED STATES  
PI US 2002025529 A1 20020228  
AI US 2001-908830 A1 20010718 (9)  
RLI Division of Ser. No. US 2000-707737, filed on 6 Nov 2000, PENDING  
PRAI US 1999-163742P 19991104 (60)  
US 1999-141503P 19990628 (60)  
US 1999-147199P 19990803 (60)  
US 2000-186856P 20000303 (60)  
DT Utility  
FS APPLICATION  
LREP TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR,  
SAN FRANCISCO, CA, 94111-3834  
CLMN Number of Claims: 54  
ECL Exemplary Claim: 1  
DRWN 17 Drawing Page(s)  
LN.CNT 2222  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Methods for high speed, high throughput analysis of polynucleotide  
sequences, and apparatuses with which to carry out the methods are  
provided in the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 6 OF 12 USPATFULL  
AN 2002:346801 USPATFULL  
TI Method for identifying polymorphisms  
IN Stanton, Jr., Vince P., Belmont, MA, United States  
Wolfe, Jia Liu, Winchester, MA, United States  
Kawate, Tomohiko, Cambridge, MA, United States  
Verdine, Gregory L., Cambridge, MA, United States  
Olson, Jeffrey, Chelmsford, MA, United States  
PA Variagenics, Inc., Cambridge, MA, United States (U.S. corporation)  
PI US 6500650 B1 20021231  
AI US 2000-655104 20000905 (9)  
RLI Continuation-in-part of Ser. No. US 1999-394467, filed on 10 Sep 1999  
Continuation-in-part of Ser. No. US 1999-394457, filed on 10 Sep 1999  
Continuation-in-part of Ser. No. US 1999-394774, filed on 10 Sep 1999  
Continuation-in-part of Ser. No. US 1999-394387, filed on 10 Sep 1999  
PRAI US 1998-102724P 19981001 (60)  
US 1999-149533P 19990817 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Riley, Jezia  
LREP Lyon & Lyon LLP  
CLMN Number of Claims: 31  
ECL Exemplary Claim: 1  
DRWN 72 Drawing Figure(s); 59 Drawing Page(s)  
LN.CNT 6037  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to methods for the detection of  
polymorphism in polynucleotides by using hybridization of fragments of  
segments of a polynucleotide suspected of containing a polymorphism with  
an oligonucleotide having a sequence complementary to a fragment

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identifying the polymorphism and subsequent detection of incorporated labels in the oligonucleotide-fragment duplex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 7 OF 12 USPATFULL  
AN 2002:50774 USPATFULL  
TI Methods and products for analyzing polymers  
IN Chan, Eugene Y., Brookline, MA, United States  
PA US Genomics, Woburn, MA, United States (U.S. corporation)  
PI US 6355420 B1 20020312  
AI US 1998-134411 19980813 (9)  
RLI Continuation of Ser. No. WO 1998-US3024, filed on 11 Feb 1998  
PRAI US 1997-37921P 19970212 (60)  
US 1997-64687P 19971105 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Taylor, Janell E.  
LREP Wolf, Greenfield & Sacks, P.C.  
CLMN Number of Claims: 123  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 6818  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Methods and products for analyzing polymers are provided. The methods include methods for determining various other structural properties of the polymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 8 OF 12 USPATFULL  
AN 2001:121253 USPATFULL  
TI Analytical methods and materials for nucleic acid detection  
IN Shultz, John William, Verona, WI, United States  
Lewis, Martin K., Madison, WI, United States  
Mandrekar, Michelle, Oregon, WI, United States  
Leippe, Donna, Middleton, WI, United States  
Smith, Jr., Roderick R., Fitchburg, WI, United States  
Welch, Roy, Palo Alto, CA, United States  
PA Promega Corporation, Madison, WI, United States (U.S. corporation)  
PI US 6268146 B1 20010731  
AI US 1999-425460 19991122 (9)  
RLI Continuation-in-part of Ser. No. US 1999-358972, filed on 21 Jul 1999  
Continuation-in-part of Ser. No. US 1999-252436, filed on 18 Feb 1999  
Continuation-in-part of Ser. No. US 1998-42287, filed on 13 Mar 1998  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Fredman, Jeffrey; Assistant Examiner: Chakrabarti, Arun  
LREP Welsh & Katz, Ltd.  
CLMN Number of Claims: 36  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 2274  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Mass spectrometric, absorbance spectroscopic and fluorescence spectroscopic processes are disclosed to detect the depolymerization of a nucleic acid hybrid in order to qualitatively and quantitatively assay for the presence of a predetermined nucleic acid target. Applications of those processes include the detection of single nucleotide polymorphisms, identification of single base changes, speciation, determination of viral load, genotyping, medical marker diagnostics, and

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the like, including multiplexed assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 9 OF 12 USPATFULL  
AN 2001:116799 USPATFULL  
TI DNA polymerases having improved **labeled nucleotide**  
incorporation properties  
IN Brandis, John, Hercules, CA, United States  
Bloom, Curtis, Chino Hills, CA, United States  
Richards, John H., Bradbury, CA, United States  
PA PE Corporation (NY), Foster City, CA, United States (U.S. corporation)  
California Institute of Technology, Pasadena, CA, United States (U.S.  
corporation)  
PI US 6265193 B1 20010724  
AI US 1998-41878 19980312 (9)  
PRAI US 1997-39610P 19970312 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Hutson,  
Richard  
LREP Bortner, Scott R.  
CLMN Number of Claims: 13  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1260

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to mutant DNA polymerases that exhibit reduced discrimination against labeled nucleotides into polynucleotides. The DNA polymerases of the invention have at least one mutation in the nucleotide label interaction region of the enzyme such the mutation results in reduced discrimination against labeled nucleotides. The nucleotide label interaction regions is located at portions of the O-helix, (ii) the K helix, and (iii) the inter O-P helical loop of Taq DNA polymerase or analogous positions in other DNA polymerases.

In addition to providing novel mutant DNA polymerases, the invention also provides polynucleotides encoding the subject mutant DNA polymerases. The polynucleotides provided may comprise expression vectors for the recombinant production of the mutant polymerases. The invention also provide host cells containing the subject polynucleotides. The invention also includes numerous methods of using the subject DNA polymerases, including uses for chain termination sequencing and PCR. Another aspect of the invention is to provide kits for synthesizing fluorescently labeled polynucleotides in accordance with the methods of the invention. Kits of the invention comprise a mutant DNA polymerase of the invention and a fluorescently **labeled nucleotide** that exhibits reduced discrimination with respect to the mutant DNA polymerase in the kit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 10 OF 12 USPATFULL  
AN 2001:47770 USPATFULL  
TI Molecular motors  
IN Chan, Eugene Y., Boston, MA, United States  
PA US Genomics, Woburn, MA, United States (U.S. corporation)  
PI US 6210896 B1 20010403  
AI US 1999-374414 19990813 (9)  
PRAI US 1998-96540P 19980813 (60)  
DT Utility  
FS Granted

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EXNAM Primary Examiner: Brusca, John S.; Assistant Examiner: Siu, Stephen  
LREP Wolf, Greenfield & Sacks, P.C.  
CLMN Number of Claims: 39  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 2458

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to molecular motors and their use in linear analysis of polymers. In particular, molecular motors are used to move polymers with respect to a station such that specific signals arise from the interaction between the polymer and an agent at the station.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 11 OF 12 USPATFULL  
AN 1998:154028 USPATFULL  
TI Method for the detection of genetic diseases and gene sequence variations by single nucleotide **primer extension**  
IN Bajaj, S. Paul, St. Louis, MO, United States  
PA St. Louis University, St. Louis, MO, United States (U.S. corporation)  
PI US 5846710 19981208  
AI US 1993-103408 19930806 (8)  
RLI Continuation of Ser. No. US 1990-608225, filed on 2 Nov 1990, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Sisson, Bradley L.  
LREP Senniger, Powers, Leavitt & Roedel  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 697

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Method for screening a sample oligonucleotide for a variation in sequence at a predetermined position thereof relative to a nucleic acid the sequence of which is known, wherein the sample oligonucleotide is provided as a single stranded molecule, the single stranded molecule is mixed with an inducing agent, a **labeled nucleotide**, and a **primer** having a sequence identical to a region flanking the predetermined position to form a mixture, the mixture having an essential absence of nucleotides constituted of bases other than the base of which the **labeled nucleotide** is constituted, the mixture is subjected to conditions conducive for the annealing of the **primer** to the single stranded molecule and the formation of a **primer extension** product incorporating the **labeled nucleotide**, and the mixture is analyzed for the presence of **primer extension** product containing **labeled nucleotide**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 12 OF 12 USPATFULL  
AN 1998:138641 USPATFULL  
TI Methods for measuring telomere length  
IN Kozlowski, Michael R., Palo Alto, CA, United States  
Prowse, Karen R., Groningen, Netherlands  
Wang, Sy-Shi, Burlingame, CA, United States  
Wong, Sharon, San Jose, CA, United States  
Kim, Nam Woo, San Jose, CA, United States  
Allsopp, Richard, Menlo Park, CA, United States  
PA Geron Corporation, Menlo Park, CA, United States (U.S. corporation)  
PI US 5834193 19981110



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AI US 1996-660402 19960607 (8)  
RLI Continuation-in-part of Ser. No. US 1995-479916, filed on 7 Jun 1995,  
now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Zitomer, Stephanie W.  
LREP Kaster, Kevin R., Stracker, Elaine C.  
CLMN Number of Claims: 9  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1906

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions for the measurement of telomere length have application in medical diagnostic, prognostic, and therapeutic procedures. The methods for measuring telomere length include **primer extension**-based methods and probe-based methods. The **primer extension** methods involve elongation of telomeric, linker, and/or subtelomeric based primers under conditions such that the telomere serves as a template for **primer extension** and that the resultant **primer extension** products can be compared to standards of known length to provide a measure of telomere length. The probe based methods allow for telomere length measurements using DNA from lysed or whole cells and involve hybridizing an excess of probe to all telomeric repeat sequences in the telomere, measuring the amount of bound probe, and correlating the amount of bound probe measured with telomere length.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=>

=> s oligonucleotide? (5a) repeat (10a) labeled nucleotide? (5a) downstream  
L17 0 OLIGONUCLEOTIDE? (5A) REPEAT (10A) LABELED NUCLEOTIDE? (5A)  
DOWNSTREAM

=> s oligonucleotide? (15a) repeat (10a) labeled nucleotide? (5a) downstream  
L18 0 OLIGONUCLEOTIDE? (15A) REPEAT (10A) LABELED NUCLEOTIDE? (5A)  
DOWNSTREAM

=> s oligonucleotide? (15a) repeat (10a) labeled nucleotide? (15a) downstream  
L19 2 OLIGONUCLEOTIDE? (15A) REPEAT (10A) LABELED NUCLEOTIDE? (15A)  
DOWNSTREAM

=> d l19 bib abs 1-2

L19 ANSWER 1 OF 2 USPATFULL  
AN 2003:106233 USPATFULL  
TI Compositions and methods for the therapy and diagnosis of pancreatic  
cancer  
IN Benson, Darin R., Seattle, WA, UNITED STATES  
Kalos, Michael D., Seattle, WA, UNITED STATES  
Lodes, Michael J., Seattle, WA, UNITED STATES  
Persing, David H., Redmond, WA, UNITED STATES  
Hepler, William T., Seattle, WA, UNITED STATES  
Jiang, Yuqiu, Kent, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)  
PI US 2003073144 A1 20030417  
AI US 2002-60036 A1 20020130 (10)  
PRAI US 2001-333626P 20011127 (60)  
US 2001-305484P 20010712 (60)  
US 2001-265305P 20010130 (60)  
US 2001-267568P 20010209 (60)  
US 2001-313999P 20010820 (60)  
US 2001-291631P 20010516 (60)  
US 2001-287112P 20010428 (60)  
US 2001-278651P 20010321 (60)  
US 2001-265682P 20010131 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 14253  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Compositions and methods for the therapy and diagnosis of cancer,  
particularly pancreatic cancer, are disclosed. Illustrative compositions  
comprise one or more pancreatic tumor polypeptides, immunogenic portions  
thereof, polynucleotides that encode such polypeptides, antigen  
presenting cell that expresses such polypeptides, and T cells that are  
specific for cells expressing such polypeptides. The disclosed  
compositions are useful, for example, in the diagnosis, prevention  
and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 2 OF 2 USPATFULL  
AN 2002:243051 USPATFULL  
TI Compositions and methods for the therapy and diagnosis of ovarian cancer  
IN Algate, Paul A., Issaquah, WA, UNITED STATES

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Jones, Robert, Seattle, WA, UNITED STATES  
Harlocker, Susan L., Seattle, WA, UNITED STATES  
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)  
PI US 2002132237 A1 20020919  
AI US 2001-867701 A1 20010529 (9)  
PRAI US 2000-207484P 20000526 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.